

Amendments to the Claims

1. (Currently amended) A pharmaceutical agent having serotonin 5-HT₇ receptor antagonist activity and muscarinic M₄ receptor agonist activity, for use in treating psychotic conditions, wherein the agent does not include compounds having a chemical structure falling within the following definition, namely:

bisarylazepines substituted at the azepine ring portion by a 4-methyl piperazinyl, wherein the aryl moieties are fused to the azepine ring and wherein aryl is phenyl, substituted phenyl, thienyl or substituted thienyl; including optional replacement of an azepine ring carbon atom with a nitrogen atom, or substitution of said ring carbon atom.

2. (Original) The pharmaceutical agent according to claim 1 wherein the psychotic condition is schizophrenia and/or bipolar disorder.

3. (Currently amended) The pharmaceutical agent according to claim 1 or claim 2 which comprises a mixture of at least two compounds, wherein at least one of said compounds possess possesses serotonin 5-HT₇ receptor antagonist activity and wherein at least one of said compounds possess possesses muscarinic M₄ receptor agonist activity.

4. (Currently amended) The pharmaceutical agent according to claim 1 or claim 2 which comprises a compound which possess possesses both serotonin 5-HT₇ receptor antagonist activity and muscarinic M₄ receptor agonist activity.

5. (Currently amended) The pharmaceutical agent according to any one of claims claim 1 to 4 which additionally has a low or substantially no dopaminergic D₂ receptor affinity.

6. (Original) The pharmaceutical agent according to claim 5 wherein said dopaminergic D₂ receptor affinity is a minimum of at least 5 fold less than the affinity at the muscarinic M₄ and/or serotonin 5-HT₇ receptors.

7. (Original) The pharmaceutical agent according to claim 6 wherein said dopaminergic D₂ receptor affinity is at least 50 fold less than the affinity at the muscarinic M₄ and/or serotonin 5-HT₇ receptors.

8. (Currently amended) A pharmaceutical agent according to ~~any one of claims~~ claim 1 to 7 for use in therapy.

9. (Currently amended) A pharmaceutical formulation comprising a pharmaceutical agent according to ~~any one of claims~~ claim 1 to 7 together with a pharmaceutically acceptable carrier therefor.

10. (Currently amended) A method Use of a pharmaceutical agent according to any one of claims 1 to 7 for the preparation of a medicament for the treatment or prophylaxis of schizophrenia and/or bipolar disorder, which comprises mixing the pharmaceutical agent according to claim 1 with a pharmaceutically acceptable carrier.

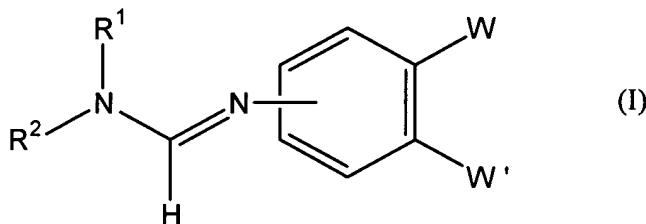
11. (Currently amended) A method of treating psychotic conditions in a patient in need thereof, comprising administering to the patient an effective amount of a pharmaceutical agent according to ~~any one of claims~~ claim 1 to 7.

12. (Currently amended) A method of identifying an agent for use in treating psychotic conditions having the properties according to the present invention comprising the steps of:

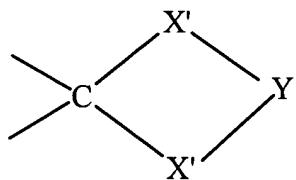
- a) providing an agent to be tested;
- b) subjecting said agent to one or more test procedures to identify 5-HT₇ receptor antagonist activity and muscarinic M₄ receptor agonist activity of said agent; wherein the desired agent is considered to have been identified when said agent provides a 5-HT₇ receptor antagonist activity and a muscarinic M₄ receptor agonist activity.

13. (Original) The method according to claim 12 further comprising the step of subjecting the agent to a test procedure to identify low dopaminergic D₂ receptor affinity.

14. (Original) A compound represented by formula (I):



where R¹ and R² independently are a hydrogen atom, a substituted or unsubstituted straight chain or branched chain C₁₋₆ alkyl group or C₁₋₆ alkoxy group, a substituted or unsubstituted C₃₋₈ cycloalkyl group or a C₃₋₈ cycloalkoxy group, or an aralkyl group, or R¹ and R² form, together with the nitrogen atom to which they are bonded, a cyclic amine; W and W' form, together with the benzene ring to which they are bonded, a fused five-membered, six-membered or seven-membered saturated carbocyclic ring being independently unsubstituted, substituted or fully substituted at each carbon atom of the ring by a group –X-R¹³ where X is O, S, SO or SO₂ and R¹³ is a hydrogen atom, a C₁₋₆ alkyl group, an acyl group, or an aroyl group or two of said –X-R¹³ groups, together with the carbon atom in the ring to which they are both bonded, form a C=S group or the following group:



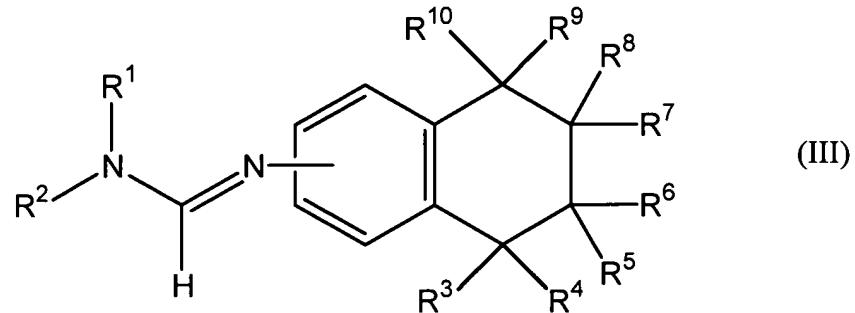
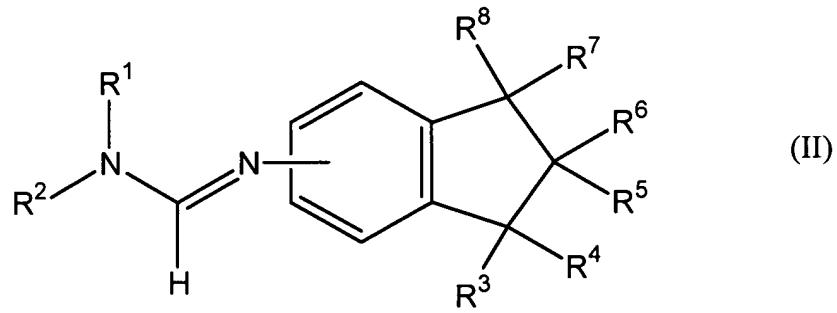
where both of X' are O or S and Y is a C₁₋₃ alkylene group.

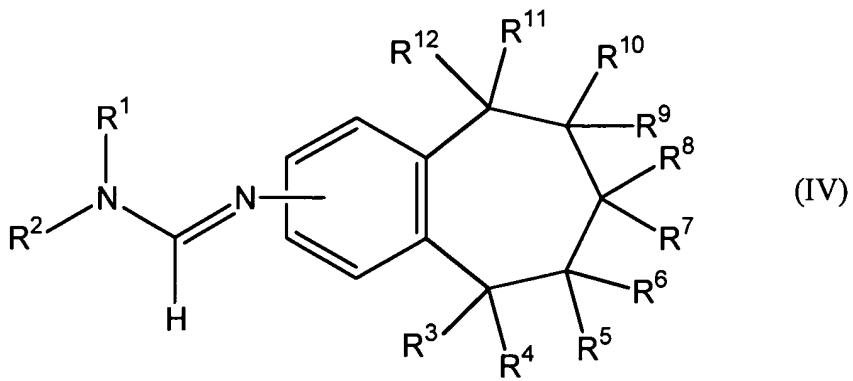
15. (Currently amended) A-The compound according to claim 14, wherein said cyclic amine is substituted by a halogen atom, a C₁₋₆ alkyl group or a C₁₋₆ alkoxy group.

16. (Currently amended) A-The compound according to claim 14 or claim 15 wherein said cyclic amine is fused with a benzene ring.

17. (Currently amended) A-The compound according to claim 16 wherein said benzene ring is substituted by one or two halogen atoms, C₁₋₆ alkyl groups or C₁₋₆ alkoxy groups.

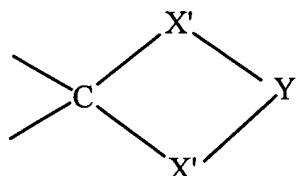
18. (Currently amended) A-The compound according to claim 14 represented by the following formulae (II), (III) and/or (IV):





wherein R¹ and R² independently are a hydrogen atom, a substituted or unsubstituted straight chain or branched chain C₁₋₆ alkyl group or C₁₋₆ alkoxy group, a substituted or unsubstituted C₁₋₆ cycloalkyl group or a C₁₋₆ cycloalkoxy group, or an aralkyl group, or R¹ and R² form, together with the nitrogen atom to which they are bonded, a cyclic amine; R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, and R¹² are independently a hydrogen atom or the group -X-R¹³ wherein X is O, S, SO or SO₂ and R¹³ is a hydrogen atom, a C₁₋₆ alkyl group, an acyl group, or an aroyl group.

19. (Currently amended) A-The compound according to claim 16-18 wherein R³ and R⁴, R⁵ and R⁶, R⁷ and R⁸, R⁹ and R¹⁰, and/or R¹¹ and R¹² together with the carbon atom in the ring to which they are both bonded, form a C=S group or the following group:



wherein both of X' are O or S and Y is a C₁₋₃ alkylene group.

20. (Currently amended) A-The compound according to claim 18 or claim 19 wherein R¹ and R² form together with the nitrogen atom to which they are bonded, a four-membered, five-membered or six-membered cyclic amine.

21. (Original) A compound according to claim 20 wherein said six-membered cyclic amine is fused with a benzene ring.

22. (Currently amended) ~~A~~The compound according to claim 18 wherein R¹ and R² are a C₁₋₆ alkyl group.

23. (Currently amended) ~~A~~The compound according to ~~any one of claims~~claim 14 to 22 which possesses serotonin 5-HT₇ receptor antagonist activity and/or muscarinic M₄ receptor agonist activity.

24. (Currently amended) ~~A~~The compound according to claim 23 which additionally has a low or substantially no dopaminergic D₂ receptor affinity.

25. (Currently amended) ~~A~~The compound according to ~~any one of claims~~claim 14 to 24 for use in therapy.

26. (Currently amended) A pharmaceutical formulation comprising a compound according to ~~any one of claims~~claim 14 to 24 admixed with a pharmaceutically acceptable carrier.

27. (Currently amended) A method Use of a compound according to any one of claims 14 to 24 for the preparation of a medicament for the treatment or prophylaxis of schizophrenia and/or bipolar disorder, which comprises mixing the compound according to claim 14 with a pharmaceutically acceptable carrier.

28. (Currently amended) A method of treating psychotic conditions in a patient in need thereof, comprising administering to the patient an effective amount of a compound according to ~~any one of claims~~claim 14 to 24.

29. (New) The pharmaceutical agent according to claim 3 wherein the psychotic condition is schizophrenia and/or bipolar disorder.

30. (New) The pharmaceutical agent according to claim 4 wherein the psychotic condition is schizophrenia and/or bipolar disorder.

31. (New) The pharmaceutical agent according to claim 5 wherein the psychotic condition is schizophrenia and/or bipolar disorder.

32. (New) The pharmaceutical agent according to claim 6 wherein the psychotic condition is schizophrenia and/or bipolar disorder.

33. (New) The pharmaceutical agent according to claim 7 wherein the psychotic condition is schizophrenia and/or bipolar disorder.

34. (New) The pharmaceutical agent according to claim 8 for use in therapy for schizophrenia and/or bipolar disorder.

35. (New) The pharmaceutical formulation according to claim 9 for use in therapy for schizophrenia and/or bipolar disorder.

36. (New) The method according to claim 11 wherein the psychotic condition is schizophrenia and/or bipolar disorder.

37. (New) The compound according to claim 19 wherein R¹ and R² form together with the nitrogen atom to which they are bonded, a four-membered, five-membered or six-membered cyclic amine.

38. (New) The compound according to claim 37 wherein said six-membered cyclic amine is fused with a benzene ring.

39. (New) The method according to claim 28 wherein the psychotic condition is schizophrenia and/or bipolar disorder.